

Work Order ID 75986

75986

Page 1

November-02-11 1:15:57 PM

Item ID: D135-751-011

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube Installation

Start Date: 02/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.C.J

Date: 11/11/10 Tooling:

Date: _____

Run Start ***NR1***

QC: _____

Date: _____ SPC (Y/N): _____

Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3492	Rev C								
D3507									
100	DOCUMENT CONTROL	0.00							
100									
DC	Memo	0.00							
Document Control	Photocopy bluefile & type labels per PPP D135-751-011		CHG001	8.26/27					

HJ MLJ 12-3-23

1 B75986

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID 75986***75986***

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N900040100Setup Start ***NS1***

Revision ID:

Item Name: Skidtube Installation

Stop ***NS2***

Start Date: 02/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

0.00

120

Skidtubes

Skidtubes

Skidtubes

Memo

1-Cut Aft end as per dwg D3507

2-Deburr ends

3-Drill Aft & Fwd Cap holes using DT8678 & DT8901

4-Locate DT8870 & Drill Ground wire hole on top of Tube.

6-Locate DT8870 with #30 cleco in Ground wire hole, then Pilot Drill all X-Bolt holes using #30" drill. ****DO NOT OPEN AFT CAP HOLES****

7-Open crossbolt holes to 0.3125" (3 per side). Drill pilot holes for wearplates using Dt8868, Use DT8892 FOR REAR WEARPLATE HOLES.

8-Open six rear wearplate holes using DT8892. Open holes to 0.297"

9-Open Aft & Fwd Cap holes using .208" drill.

10-Bore out aft end of tube as per Dwg D3507 & Detail "B".

11-Open ground wire hole .297" section E-E

12- Section G-G holes must be laid out manually, open to #30.

13-Deburr holes.

DD 12-3-12

11-02-24

DD 12-3-12

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 Start Date: 02/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QS1005 4.1 Memo	0.00 0.00							
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							

S126312

7/6/-123-12
/GF

DD 12-3-13

W/O:		WORK ORDER CHANGES					
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1

Cust Item ID:

Required Date: 11/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

0.00

170

Skidtubes

0.00

Skidtubes

Memo

1-Open X-Bolt holes to .375"(2Places) & .500"(2Places) as per Dwg D3507 and Detail "F"

2-Counter Sink X-BOLT holes as per Dwg D3507

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3507 & QSI 015

A/R 241 Sike Flex

Batch: M410113Exp Date: 12-8-13start time: 9:45-12:11end time: 12-03-14

9:30

5-Weld x-bolt (D3504-1/-3) spacers as per Dwg D3507 and Detail C-C & D-D.

A/R AL ROD

Batch: M120164

6-Grind welds flush

7-Drill Rivet Holes as per Dwg D3507 Using Dt8871A&B

8-Deburr Rivet holes.

DP 12-3-13

716 12-3-13

1/DC 12/03/13

BE 12/03/14

CF 12-3-14

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N900040100

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Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

**Insp.
Stamp**

QC10- Inspect visual per QSI004- ground welds

0.00

180

QC

Memo

0.00

Quality Control

190

0.00

190

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Rivet D3506-1/-3 as per Dwg D3507.

200

QC5- Inspect part completeness to step on W/O

0.00

200

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210	Pressure Wash per QSI005 4.3	0.00							
210									
HandFinish	Memo	0.00							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								

1 X M-12/03/17

220	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
220									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 8:50 OVEN TEMPERATURE: 320° FINISH TIME: 11:20								

1 B 12-3-19

230	QC3- Inspect Part Finish	0.00							
230									
QC	Memo	0.00							
Quality Control									

1 X M-12/03/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

260

260

HandFinish

Hand Finishing

HandFinishing

Memo

0.00

0.00

1- Install Wearplate & Ground Wire inserts as per Dwg D3507.

1-Inspect for Foreign objects

2-Install Fwd & Aft caps as per Dwg D3507 And Detail "A" & "B"

A/R 241 Sika Flex Batch: M1199999
 Exp Date: 12/08

3-Install Wearplates as per Dwg D3507

Note: Install (1) Bolt and (1) washer on Ground Wire insert on top of tube

Do not Install Scews where indicated on Dwg (Note #6)

A/R 241 Sika Flex Batch: M1199999
 Exp Date: 12/08

4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: 110348

5- Wing Walk as per Dwg D3507 and QSI 005 4.4

Batch: 120125

1X2/M 12/23/22

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N900040100

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Required Date: 11/11/2011 **Req'd Qty:** 1.00 *** 1 ***

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Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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270	QC5- Inspect part completeness to step on W/O	0.00
-----	---	------

270

QC	Memo	0.00
----	------	------

Quality Control

280	Pick Kit	0.00
-----	----------	------

280

Packaging	Memo	0.00
-----------	------	------

Packaging

290	OC4- 100% Inspect kits for completeness	0.00
-----	---	------

290

QC	Memo	0.00
----	------	------

Quality Control

W/O:		WORK ORDER CHANGES					
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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
300		0.00							
300	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D135-751-011								
	Location: <u>31</u>								
	PPP Rev: <u>B</u>								
310		0.00							
310	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

12/3/27
 12/3/28

12-03-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

November-02-11 1:16:02 PM

Page 1

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Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:A06-06-21New Issue JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC vcerified DD
 IPP Rev E 10.02.22 per pAR 09-043 EC verified by: DD IPP Rev:F
 10.06.09 remove seq110 DD verf:EC IPP Rev G 10.09.17
 added D3507-1-bent EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

ALS7-1032-130

Purchased

No

Each

335.0000

38

AI S7-1032-130

Insert

Location

Loc Qty

Loc Code

ST281

335

117717

27

118386

146

118966

162

D3507-1-BENT

Manufactured

No

120

Each

0.0000

1

1

D3507-1-BENT

Skidtube Assembly EC135

D3504-1

Manufactured

No

170

Each

27.0000

2

D3504-1

Crossbolt Spacer

Location

Loc Qty

Loc Code

LG

5

71130

5

LG001

22

53742

2

75240

20

120181

**

38 m/l 12/03/22

*

**

D12-3-12

**

12

BE 2/03/14

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3504-3 Manufactured No

170 Each 14.0000 1 1

D3504-3

Crossbolt Spacer

**

BE 12/03/14

Location

Loc Qty

Loc Code

LG001

14

53743

14

D3504-5 Manufactured No

170 Each 5.0000 2 2

D3504-5

Crossbolt Spacer

**

BE 12/03/14

Location

Loc Qty

Loc Code

LG

5

71226

5

D3505-1 Manufactured No

170 Each 2.0000 1 1

D3505-1

Web

**

① 7/5, 12-3-13
/ DC 12/03/13

Location

Loc Qty

Loc Code

LG

2

75211

2

D3506-1 Manufactured No

190 Each 0.0000 4 4

D3506-1

Doubler

**

④ CF 12-3-15

D3506-3 Manufactured No

190 Each 63.0000 2 2

D3506-3

Doubler

**

② CF 12-3-15

Location

Loc Qty

Loc Code

ST063

63

51790

63

November-02-11 1:16:03 PM

Shop Packet Print

Page 2

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D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

MS20601-AD4W3

Purchased

No

190

Each

2,404.000

12

12

MS20601-AD4W3

Rivet

**

CF 12-3-15

Location

Loc Qty

Loc Code

ST321

2404

114538

2404

ALS4-1032-225

Purchased

No

260

Each

2,422.000

1

1

AIS4-1032-225

Insert

**

m-l 12/03/22

Location

Loc Qty

Loc Code

ST281

2422

108696

502

110768

62

118386

858

118966

1000

AN3C4A

Purchased

No

260

Each

2,335.000

31

31

AN3C4A

BOLT

**

m-l 12/03/22

Location

Loc Qty

Loc Code

ST350

2335

117313

2

117688

5

117872

22

118112

16

118451

2

118706

314

118838

974

119328

1000

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No

260 Each 1,131.000 2 2

AN3C5A

Bolt

120423

**

2 m-l 12/03/22

Location	Loc Qty	Loc Code
FP-A	7	
115835	7	
ST350	1124	
116419	28	
117343	17	
117764	166	
117872	2	
118451	411	
119127	500	

AN526C1032R10 Purchased No

260 Each 261.0000 2 2

AN526C1032R10

Screw

**

m-l 12/03/22

Location	Loc Qty	Loc Code
FP-B	87	
108062	87	
ST327	100	
114494	100	
ST328	74	
110049	74	

AN960C10L NAS1149C0332 Purchased No

260 Each 0.0000 33 33

***AN960C10I ***

washer

**

120648

33 m-l 12/03/22

W/O:		WORK ORDER CHANGES					
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Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

D2965 Manufactured No

260 Each 39.0000 1 1

D2965

Cap, 105 Skidtube

**

M-L 12/03/22

Location Loc Qty Loc Code

FP006 39
71371 39

D2965-3 Manufactured No

260 Each 2.0000 1 1

D2965-3

Cap

**

M-L 12/03/22

Location Loc Qty Loc Code

FP005 2
50560 1
71300 1

D3492-1 Manufactured No

260 Each 86.0000 4 4

D3492-1

Plug

**

M-L 12/03/22

Location Loc Qty Loc Code

FP 86
69531 8
74444 78

D3492-3 Manufactured No

260 Each 129.0000 4 4

D3492-3

Plug

**

M-L 12/03/22

Location Loc Qty Loc Code

FP 69
74447 69
ST 60
74871 60

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 6

November-02-11 1:16:03 PM

Work Order ID: 75986

75986

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3492-7 Manufactured No

260 Each 10.0000

2 2

D3492-7

Plug

Location

Loc Qty

Loc Code

FA-A

10

71881

10

D3508-1 Manufactured No

260 Each 13.0000

1 1

D3508-1

Wearplate

Location

Loc Qty

Loc Code

FP016

13

61020 ✓

1

72933

12

D3508-3 Manufactured No

260 Each 4.0000

1 1

D3508-3

Wearplate

Location

Loc Qty

Loc Code

FP021

1

38527

1

FP21

3

72169

3

D3508-5 Manufactured No

260 Each 19.0000

1 1

D3508-5

Wearplate

Location

Loc Qty

Loc Code

FP021

19

71688 ✓

7

72416

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 75986

75986

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3508-7 Manufactured No

260

Each

6.0000

1

1

D3508-7

Wearplate

**

M-L 12/03/22

Location

Loc Qty

Loc Code

FP020

6

72932 ✓

6

D3558-1 Manufactured No

260

Each

13.0000

1

1

D3558-1

Gasket

**

M-L 12/03/22

Location

Loc Qty

Loc Code

FP014

13

50925 ✓

1

73561 ✓

12

D3558-3 Manufactured No

260

Each

2.0000

1

1

D3558-3

Gasket

**

M-L 12/03/22

Location

Loc Qty

Loc Code

FP014

2

71651

1

72170

1

D3558-5 Manufactured No

260

Each

3.0000

1

1

D3558-5

Gasket

**

M-L 12/03/22

Location

Loc Qty

Loc Code

FP014

3

67485 ✓

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 75986

75986

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3558-7 Manufactured No

260 Each 15.0000 1 1

D3558-7

Gasket

**

M-1 12/03/22

Location Loc Qty Loc Code

FP014 15

67162 3

75249 12

NAS1611-007 Purchased No

260 Each 272.0000 2 2

NAS1611-007

O-RING

**

M-1 12/03/22

Location Loc Qty Loc Code

FP-A 272

103697 272

NAS1611-010 Purchased No

260 Each 233.0000 4 4

NAS1611-010

O-RING

**

~~103697~~ 120308 4 M-1 12/03/22

Location Loc Qty Loc Code

FP 212

117460 8

118077 1

118612 3

119438 200

FP-A 21

110915 14

119307 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 9

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Work Order ID: 75986

75986

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

260

Each

194.0000

4

4

NAS1611-013

O-RING

**

Location

Loc Qty

Loc Code

FP

105

117291

2

117887

53

119438

50

FP-A

89

116582

5

119307

84

AN3C4A

Purchased

No

280

Each

2,335.000

8

8

AN3C4A

BOLT

**

Location

Loc Qty

Loc Code

ST350

2335

117313

2

117688

5

117872

22

118112

16

118451

2

118706

314

118838

974

119328

1000

AN960C10L

NAS1149C0332
R

Purchased

No

280

Each

0.0000

8

8

*AN960C10I *

washer

**

November-02-11 1:16:03 PM

Shop Packet Print

Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November-02-11 1:16:03 PM

Page 10

Work Order ID: 75986

75986

Parent Item: D135-751-011

D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 02/11/2011

Required Date: 11/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3512-1

Manufactured No

280

Each

8.0000

2

2

D3512-1

Wearplate

**

B74735 12/3/20 12/3/20

Location

Loc Qty

Loc Code

ST500

8

73955

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

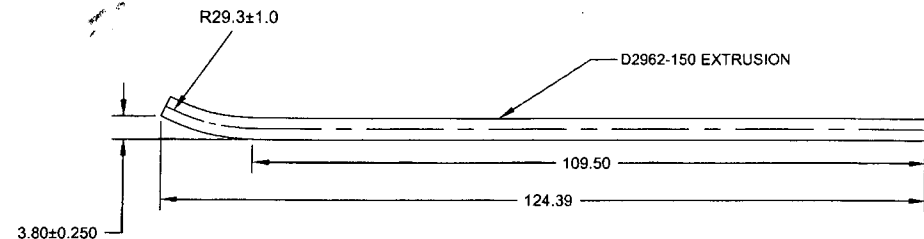
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

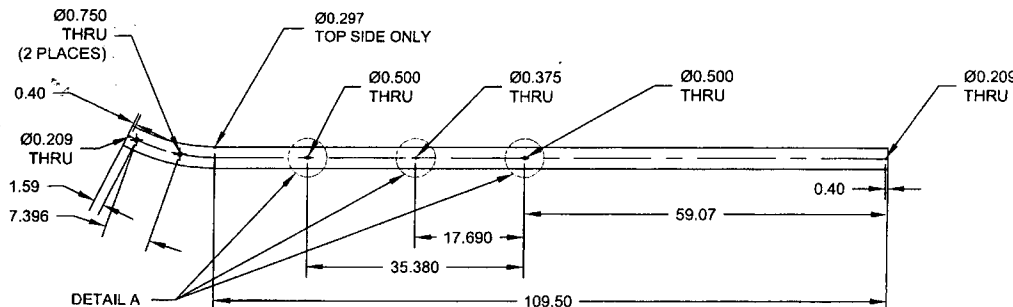
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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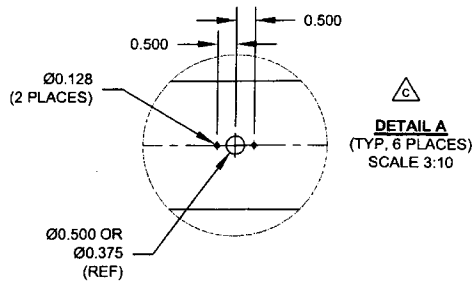
8 7 6 5 4 3 2 1



D3507-1 BENDING/CUTTING DETAIL



D3507-1 DRILLING DETAIL



△

DETAIL A
(TYP, 6 PLACES)
SCALE 3:10

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED
SUBJECT TO AMENDMENTS
WITHOUT NOTICE
WORK ORDER
NO. 75986 M.C.J
11/11/02

Qty	Part Number	Description
X	D3507-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2965	CAP
1	D2965-3	CAP
4	D3492-041	PLUG ASSEMBLY
4	D3492-043	PLUG ASSEMBLY
2	D3492-047	PLUG ASSEMBLY
2	D3504-1	CROSS BOLT SPACER
1	D3504-3	CROSS BOLT SPACER
2	D3504-5	CROSS BOLT SPACER
1	D3505-1	WEB
4	D3506-1	DOUBLER
2	D3506-3	DOUBLER
1	D3508-1	WEARPLATE
1	D3508-3	WEARPLATE
1	D3508-5	WEARPLATE
1	D3508-7	WEARPLATE
1	D3558-1	GASKET
1	D3558-3	GASKET
1	D3558-5	GASKET
1	D3558-7	GASKET
38	AELS-1032-130	INSERT
1	AELS-1032-225	INSERT
31	AN3C4A	BOLT
2	AN3C5A	BOLT
2	AN526C1032-10	SCREW
33	AN960C10L	WASHER
12	MS20601AD4W3	RIVET

GENERAL NOTES:

- 1) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3505-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) DIMENSIONS: INCHES UNLESS OTHERWISE NOTED
- 4) WELDING TO BE DONE PER DART QSI 004
- 5) INSERT D3505-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING
- 6) USE DART DRILL TEMPLATE DT8868 TO LOCATE AND DRILL Ø0.297 HOLES (38 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION C-C (38 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- 7) DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS

RELEASED
07.11.16

C	ADD D3504-5, FOR SKID GEAR DEFLECTOR; CHANGE FWD CAP BOLT TO AN526C1032-10 SCREW	DC	07.09.19
B	ADD GASKET, CHANGE HARDWARE MAT'L	PH	06.11.01
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	JFC	PORT HADLOCK, WA	
CHECKED	PH	DRAWING NO.	REV. C
MFG. APPR.	PH	D3507	SHEET 1 OF 2
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	EC 135 SKIDTUBE	NTS
DATE	07.09.19	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

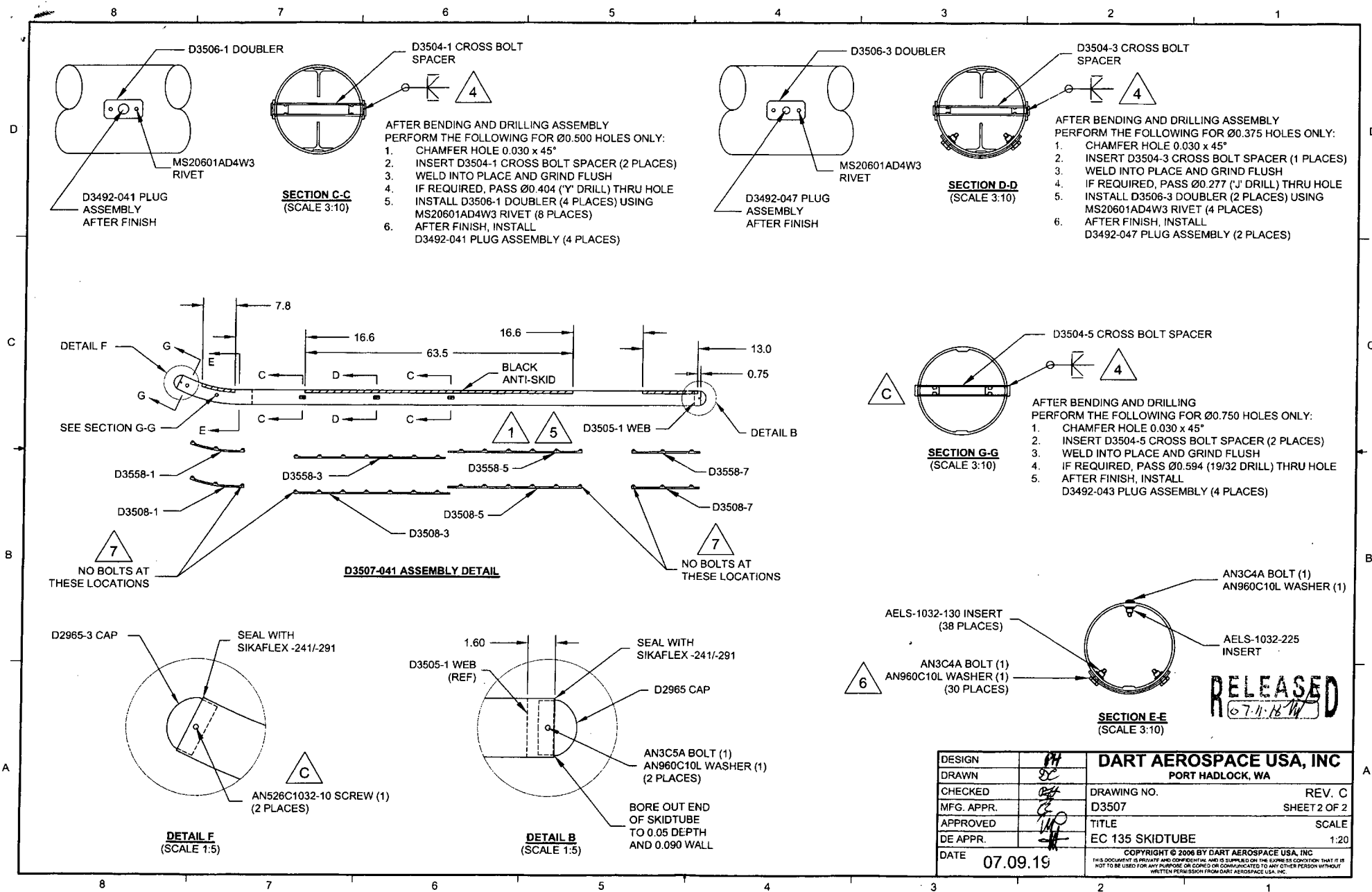
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

75986



DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	SC	DRAWING NO.	REV. C
MFG. APPR.	SC	D3507	SHEET 2 OF 2
APPROVED	WFO	TITLE	SCALE
DE APPR.	WFO	EC 135 SKIDTUBE	1:20
DATE	07.09.19	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
07-11-16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

5.0 PARTS LIST

Item	Qty -011	Qty -041	Qty -043	Qty -101	Part Number	Description
	X				D135-751-011	SKIDTUBE INSTALLATION
	1	X			D135-751-041	REPLACEMENT SKIDTUBE
			X		D135-751-043	WEARPLATE KIT
				X	D135-751-101	SKIDTUBE EXTENSION KIT
1		1			D3507-041	SKIDTUBE ASSEMBLY
2	4				**BRS8-96/48SZ-M8-W2	CLAMP
3	8				**LN9038-08032	SCREW
4		1			*D2965	CAP
5		1			*D2965-3	CAP
6		2			***AELS-1032-130	INSERT
7		2			***AELS-1032-225	INSERT
8		2			*AN3C5A	BOLT
9		2			*AN960C10L	WASHER
10		2			*AN526C1032-10	SCREW
20A		1	1		*D3508-1	WEARPLATE
20B		1	1		*D3558-1	GASKET
21A		1	1		*D3508-3	WEARPLATE
21B		1	1		*D3558-3	GASKET
22A		1	1		*D3508-5	WEARPLATE
22B		1	1		*D3558-5	GASKET
23A		1	1		*D3508-7	WEARPLATE
23B		1	1		*D3558-7	GASKET
24		38			*AELS-1032-130	INSERT
25	8	30	38		*AN3C4A	BOLT
26	8	30	38		*AN960C10L	WASHER
27	2		2		D3512-1	WEARPLATE
30		1			*AELS-1032-225	INSERT
31		1			*AN3C4A	BOLT
32		1			*AN960C10L	WASHER
40		4			*D3492-041	PLUG ASSEMBLY
41		4			***NAS1611-010	O-RING
42		2			*D3492-047	PLUG ASSEMBLY
43		2			***NAS1611-007	O-RING
44		4			*D3506-1	DOUBLER
45		8			*MS20601AD4W3	RIVET
46		2			*D3506-3	DOUBLER
47		4			*MS20601AD4W3	RIVET
48		4			*D3492-043	PLUG ASSEMBLY
49		4			***NAS1611-013	O-RING
50				1	D3510-041	INSERT ASSEMBLY
51				2	***AELS-1032-130	INSERT
52				6	***AELS-1032-225	INSERT
53				2	***ALS4-428-165	INSERT
54				2	AN4C7A	BOLT
55				2	AN960C416L	WASHER
56				2	AN3C4A	BOLT
57				8	AN3C7A	BOLT
58				10	AN960C10L	WASHER

* PART IS INCLUDED WITH D3507-041 SKIDTUBE ASSEMBLY

** TO BE SUPPLIED BY CUSTOMER, LISTED AS REFERENCE ONLY

*** DENOTES PART IS INCLUDED WITH ASSEMBLY ABOVE

NO. 257

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: B666P
Part number: D135-751-011
Description: 135
Welding Process: Tig[☒] Mig[]
Base material: Aluminum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Lums Date of Test Coupon 11-06-22

Welder Barclay Elliot Date of Test Coupon 11-06-22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld